RESPONSE

Claims 1-35 were pending in the Application. Claims 1, 8, 10, 17, 18, 19, 22, 27, and 28 are amended by the present Amendment. Support for the amendments may be found in the Specification at, for example, page 4, paragraph [0014], page 10, paragraph [0048], and page 19, paragraph [0086]. The Specification has also been amended to correct typographical / grammatical errors that one skilled in the art would have recognized as obvious errors, and for which one skilled in the art would have recognized the appropriate correction. Additionally, Applicants have amended the Specification to correct the objections to the drawings. Applicants respectfully submit that no new matter is introduced by the present Amendment. Upon entry of the present Amendment, claims 1-35 are pending and presented for reconsideration.

Applicants would also like to thank the Examiner for participating in a telephone interview with Applicants' undersigned representative held on September 4, 2003. During the September 4, 2003 interview, the undersigned further explained the invention and proposed the claim amendments as shown above.

The Claims as Amended Are Patentably Distinct Over the Cited References

Claims 1, 18 and 28 have been amended to further clarify the invention. In particular, claims 1, 18 and 28 have all been amended in pertinent part to recite enabling customizable data paths.

As we discussed in the September 4 interview, none of the cited references teach or suggest this feature. Specifically, Ussery, which is assigned to the assignee of the instant application, teaches selecting from a <u>set data paths</u> to eliminate time intensive analysis of possible data paths. (Col. 2, lines 60-65). Ussery also explains that his mapping process eliminates time intensive analysis of every possible data path. (Col. 5, lines 42-47. Thus, Ussery does not teach or suggest custom configurable computational units and data paths as recited in claims 1, 18 and 28. Since each of claims 2-17, 19-27, and 29-35 depend from claims 1, 18 and

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28, Applicants respectively request that the Examiner reconsider and withdraw the §102 rejection of these claims.

Killian, Rupp, Greenbaum, and Suzuki Fail to Remedy the Deficiencies of Ussery

Killian teaches that "[h]ardware synthesis creates an optimal integration of the new function into the hardware datapath." (Col. 40, lines 20-25). Thus, the tool itself creates its version of optimal datapaths, not the designer.

Rupp teaches the use of "five primary data paths which allow connection of an (sic) R[econfigurable]S[ystem]P[rocessor] component to other RSP components, off chip memories, sensors, and actuators." (Col. 12, lines 37-39). Thus, Rupp teaches that there are a preset number (i.e., five) of primary data paths. Since Rupp teaches a preset number of data paths instead of the recited *custom configurable* data paths, it too fails to remedy the deficiencies of Ussery. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw any rejections based on Rupp.

Greenbaum teaches a selectable hardware organization between *a plurality of hardware architectures.*" (Abstract). As discussed above, selection between predefined hardware choices does not equal the recited customizable data paths. Selectability between a preset number of hardware architectures does not provide the interchangeability that free reign to custom configure the data paths provides. Since Greenbaum also fails to remedy the defects of Ussery, Applicants respectfully request that the Examiner reconsider and withdraw any rejects based on Greenbaum.

Suzuki does not teach or suggest *custom configurable* data paths, as recited in independent claims 1, 18, and 28. Thus, Suzuki fails to remedy the deficiencies of Ussery.

Enokido also does not teach or suggest custom configurable data paths, as recited in independent claims 1, 18, and 28. Thus, Enokido also fails to remedy the deficiencies of Ussery.

SUMMARY

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Claims 1-35 were pending in the Application. Claims 1, 8, 10, 17, 18, 19, 22, 27, and 28 are amended by the present Amendment. Applicants respectfully submit that no new matter is introduced by the present Amendment.

Applicants request that the Examiner reconsider the application and claims 1-35 in light of the foregoing Amendment and Response, and respectfully pass them to allowance. If, in the Examiner's opinion, a telephonic interview would expedite the favorable prosecution of the application, the undersigned attorney would welcome the opportunity to discuss any outstanding issues, and to work with the Examiner toward placing the application in condition for allowance.

Respectfully submitted,

Date: October 03, 2003
Reg. No.: 52,538
Tel. No. (617) 248-7506
Fax No. (617) 248-7100

Andrew F. Abramson
Attorney for Applicants
Testa, Hurwitz, & Thibeault, LLP
High Street Tower
125 High Street
Boston, MA 02110

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